**PATENT** Atty Docket No.: 10013854-1

App. Ser. No.: 09/865,605

## **IN THE CLAIMS:**

processors,

Please find below a listing of all of the pending claims. The statuses of the claims are set forth in parentheses.

(Currently Amended) A multiprocessing system comprising:
 multiple processors mounted on a single die; and
 multiple operating systems residing in a memory connected to said multiple

wherein each of said multiple processors executes an operating system of said multiple operating systems, and two or more of said multiple processors are capable of simultaneously executing two or more operating systems of said multiple operating systems.

- 2. (Currently Amended) The system of claim 1, wherein <u>at least one of said</u> processors <u>are is</u> operable to execute two or more of said multiple operating systems simultaneously.
- 3. (Currently Amended) The system of claim 2 1, wherein said multiple processors are connected to said memory via a bus to execute said multiple operating systems.
- 4. (Currently Amended) The system of claim 2 1, wherein said multiple processors are directly connected to said memory to execute said multiple operating systems.

**PATENT**Atty Docket No.: 10013854-1
App. Ser. No.: 09/865,605

5. (Original) The system of claim 1, wherein each of said processors executes a distinct operating system of said multiple operating systems.

- 6. (Original) The system of claim 1, further comprising multiple processor groups, wherein each processor group includes at least two of said multiple processors executing one of said multiple operating systems.
- 7. (Currently Amended) A multiprocessing system comprising:

  a plurality of processor groups mounted on a single die; and

  multiple operating systems residing in a memory connected to said groups,

  wherein each of said groups executes an operating system of said multiple operating systems,

  and two or more of said plurality of processor groups are capable of simultaneously executing

  two or more operating systems of said multiple operating systems.
- 8. (Original) The system of claim 7, wherein each of said groups includes multiple processors.
  - 9. (Canceled)
- 10. (Currently Amended) The system of claim 9 8, wherein said multiple processors in each of said groups are connected to said memory via a bus to execute said multiple operating systems.

**PATENT**Atty Docket No.: 10013854-1
App. Ser. No.: 09/865,605

11. (Currently Amended) The system of claim 9 8, wherein said multiple processors in each of said groups are directly connected to said memory to execute said multiple operating systems.

- 12. (Original) The system of claim 7, wherein each of said groups executes a distinct operating system of said multiple operating systems.
- 13. (Currently Amended) A multiprocessing apparatus comprising:

  processor means for executing a plurality of operating system means, wherein said processor means includes a plurality of processors mounted on a single die, and wherein said processor means is operable to simultaneously execute two or more operating system means of said plurality of operating system means; and

memory means for storing said plurality of operating system means.

- 14. (Original) The apparatus of claim 13, wherein said processor means is connected to said memory means via a bus to execute said multiple operating systems.
- 15. (Original) The apparatus of claim 13, wherein said processor means is directly connected to said memory means to execute said multiple operating systems.
- 16. (Original) The apparatus of claim 13, wherein each of said processors of said processor means is operable to execute a distinct one of said plurality of operating system means.

**PATENT**Atty Docket No.: 10013854-1
App. Ser. No.: 09/865,605

17. (Original) The apparatus of claim 13, wherein said processor means includes a plurality of processor group means, wherein each processor group means includes at least two of said plurality of processors.

18. (Currently Amended) The apparatus of claim 13 17, wherein said plurality of processor group means is operable to execute one or more of said plurality of operating system means.

19. (Currently Amended) The apparatus of claim 13 17, wherein each of said plurality of processor group means is operable to execute a distinct one of said plurality of operating system means.

20. (Currently Amended) The apparatus of claim 13, wherein at least one of said <u>plurality of processors</u> processor means is operable to simultaneously execute each <u>two</u> or more of said plurality of operating system means.